



PHYSICAL vs CHEMICAL PROPERTIES AND CHANGES



Keep this in your notebook as a study guide! You will have a quiz on this next week!

Background: Keeping the difference between physical and chemical properties as well as changes can be a challenge! This worksheet will help you do this.

<u>Vocabulary Word</u>	<u>Definition</u>
Physical Property	
Physical Change	Change in which the identity of the substance does NOT change
Chemical Property	
Chemical Change	

Part One: Physical or Chemical Property? Fill in the chart using the vocabulary words or phrases provided.

Word Bank

Boiling point	Ability to rust	Melting point	Brittleness	Reactivity to vinegar
Elasticity	Flammability	Density	Transparency	Malleability

Each word is used once. Define the word when done!

<u>Physical Property</u>	<u>Definition</u>
	- the property of letting light pass through a substance.
Boiling point	-
Melting point	
	- the ability to bend
	- the tendency to crack or break.
Elasticity	
	- amount of matter in a given amount of space.
<u>Chemical Property</u>	<u>Definition</u>
	- the ability to burn
	- reacts with oxygen to produce rust
Reactivity with vinegar	



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Part Two: Physical or Chemical Change? Indicate with a 'P' or a 'C' which type of change is taking place.

1.		glass breaking	10.		mixing salt and water
2.		hammering wood together	11.		mixing oil and water
3.		a rusting bicycle	12.		water evaporating
4.		melting butter	13.		cutting glass
5.		separate sand from gravel	14.		burning leaves
6.		bleaching your hair	15.		fireworks exploding
7.		frying an egg	16.		cutting your hair
8.		squeeze oranges for juice	17.		crushing a can
9.		melting ice	18.		boiling water



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KEY

<u>Vocabulary Word</u>	<u>Definition</u>
Physical Property	Characteristics of matter that can be seen through direct observation.
Physical Change	Change in which the identity of the substance does NOT change.
Chemical Property	Characteristic of matter that can only be observed when one substance changes into a different substance.
Chemical Change	Transforms one type of matter into another kind, which may have different properties.

Part One: Physical or Chemical Property? Fill in the chart using the vocabulary words or phrases provided.

Word Bank

Boiling point	Ability to rust	Melting point	Brittleness	Reactivity to vinegar
Elasticity	Flammability	Density	Transparency	Malleability

Each word is used once. Define the word when done!

<u>Physical Property</u>	<u>Definition</u>
Transparency	- the property of letting light pass through a substance
Boiling point	- the temperature at which a liquid transforms to a gas
Melting point	- the temperature at which a solid transforms to a liquid
Malleability	- the ability to bend
Brittleness	- the tendency to crack or break
Elasticity	- ability to be stretched or compressed
Density	- the amount of matter in a given amount of space.
<u>Chemical Property</u>	<u>Definition</u>
Flammability	- the ability to burn
Ability to rust	- reacts with oxygen to produce rust
Reactivity with vinegar	- produces a new substance



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KEY

Part Two: Physical or Chemical Change? Indicate with a 'P' or a 'C' which type of change is taking place.

1.	P	glass breaking	10.	P	mixing salt and water
2.	P	hammering wood together	11.	P	mixing oil and water
3.	C	a rusting bicycle	12.	P	water evaporating
4.	P	melting butter	13.	P	cutting glass
5.	P	separate sand from gravel	14.	C	burning leaves
6.	C	bleaching your hair	15.	C	fireworks exploding
7.	C	frying an egg	16.	P	cutting your hair
8.	P	squeeze oranges for juice	17.	P	crushing a can
9.	P	melting ice	18.	P	boiling water